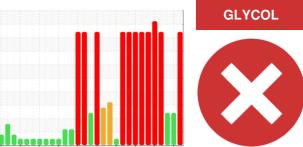


PROBLEM SUMMARY

Sample Rating Trend



Machine Id

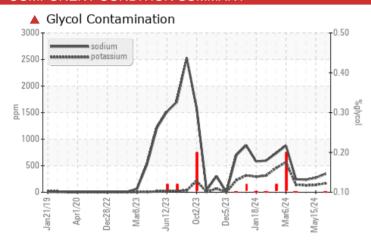
726047-310048

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS								
Sample Status				SEVERE	ABNORMAL	ABNORMAL		
Potassium	ppm	ASTM D5185m	>20	<u> </u>	139	<u>▲</u> 128		
Glycol	%	*ASTM D2982		▲ 0.10	NEG	NEG		

Customer Id: GFL821 Sample No.: GFL0105301 Lab Number: 06209778 Test Package: FLEET



To manage this report scan the QR code

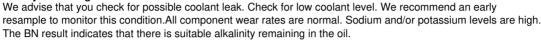
To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

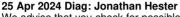
RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Resample			?	We recommend an early resample to monitor this condition.		
Check Glycol Access			?	We advise that you check for the source of the coolant leak.		

HISTORICAL DIAGNOSIS

15 May 2024 Diag: Jonathan Hester



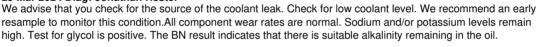




We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.



25 Mar 2024 Diag: Jonathan Hester









OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

726047-310048

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a high concentration of glycol present in the oil.

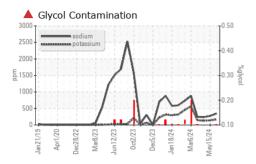
Fluid Condition

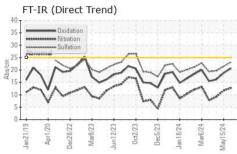
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

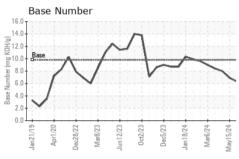
GAL) #2019 April020 Dec2022 Mail023 Jun2023 Dec2023 Jun2024 Mail024 Mail024 Mail024 Mail024 Mail024						
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0105301	GFL0105232	GFL0105046
Sample Date		Client Info		31 May 2024	15 May 2024	25 Apr 2024
Machine Age	hrs	Client Info		21392	21271	21099
Oil Age	hrs	Client Info		600	150	150
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				SEVERE	ABNORMAL	ABNORMAL
CONTAMINA [*]	TION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR META	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	35	25	15
Chromium	ppm	ASTM D5185m	>4	<1	2	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	2	2
Lead	ppm	ASTM D5185m	>45	<1	<1	0
Copper	ppm	ASTM D5185m	>85	2	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	1	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	89	86	82
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	821	920	901
Calcium	ppm	ASTM D5185m	1070	985	1036	1021
Phosphorus	ppm	ASTM D5185m	1150	895	964	989
Zinc	ppm	ASTM D5185m	1270	1106	1186	1203
Sulfur	ppm	ASTM D5185m	2060	3073	3395	3445
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	5	4	3
Sodium	ppm	ASTM D5185m		347	<u>▲</u> 272	<u>^</u> 235
Potassium	ppm	ASTM D5185m	>20	168	<u> </u>	<u>▲</u> 128
Glycol	%	*ASTM D2982		▲ 0.10	NEG	NEG
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	12.8	11.7	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	21.5	19.7
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	18.8	16.2
Dana Niverbay (DNI)	mg KOH/g	ASTM D2896	9.8	6.3	6.9	8.0
Base Number (BN)	illy NOI1/y	70 LINI D5030	5.0	0.3	0.5	0.0

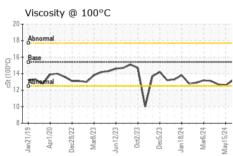


OIL ANALYSIS REPORT





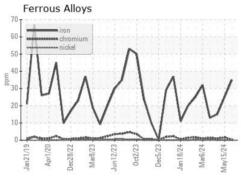


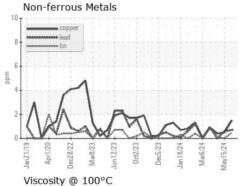


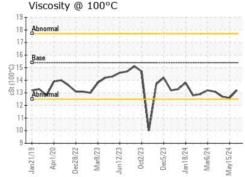
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

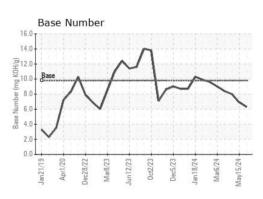
FLUID PROPI	ERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	12.6	12.7

GRAPHS













Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0105301 Lab Number : 06209778

Received **Tested** Unique Number : 11082642

: 14 Jun 2024 : 17 Jun 2024 Diagnosed : 17 Jun 2024 - Wes Davis Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 821 - Ozarks Hauling 33924 Olath Drive Lebanon, MO

US 65536 Contact: Landen Johnson landen.johnson@gflenv.com T: (417)664-0010

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: GFL821 [WUSCAR] 06209778 (Generated: 06/17/2024 10:49:42) Rev: 1